

Globe valves, 3-way, with flange PN16

- For closed cold and hot water systems
- For modulating water-side control of air handling units and heating systems
- For diverting application only



Type overview

Type	K _{vs} [m ³ /h]	DN [mm]	Stroke [mm]	ΔP _s / ΔP _{max} [kPa]
H765D-Q	63	65	20	220
H780D-R	100	80	30	200
H7100D-S	160	100	40	200
H7125D-T	250	125	40	110 / 150
H7150D-T	350	150	40	60 / 100
H7200D-U	520	200	40	80

ΔP_s will be variant depends on actuator selection.

Technical data

Functional data

Flow media Cold and hot water, water with max. 50% volume of glycol

Temperature of medium 0°C ... +150°C

Rated pressure P_s 1600kPa (PN16)

Flow characteristic Control path AB-A: equal percentage (to VDI/VDE 2173) n(gl) = 3, optimized in the opening range
Bypass AB-B: linear (VDI/VDE 2173)

Rangeability S_v 100:1

Leakage rate Max. 0.02% of kvs value on all path (DIN EN 1349 and DIN EN 60534-4)

Medium velocity Max. 2 m/s

Pipe connection Flange to ISO 7005-2 (PN16)

Stroke See «Type overview»

Valve stem extends Flow of A increase, B decrease

Installation position Upright to horizontal (in relation to the stem)

Maintenance Maintenance-free

Materials

Body Ductile iron GGG40

Valve cone Stainless steel SS304

Valve stem Stainless steel SS630

Valve seat Stainless steel SS304

Stem seal PTFE & FFKM

Dimensions / Weights

Dimensions and weights See «Dimensions and weights»

Safety notes



- This globe valve has been designed for use in stationary heating, ventilation and air-conditioning systems and is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- It may only be installed by suitably trained personnel. All applicable legal or institutional installation regulations must be complied with.
- The valve does not contain any parts that can be replaced or repaired by the user.
- The valve is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.
- The recognised rules should be applied when determining the flow characteristic of final controlling elements.

Product features

Mode of operation

The globe valve is operated by an EV or RV series linear actuator. The linear actuators are controlled by a standard modulating or 3-point control system and move the cone of the valve, the throttling device, to the opening position dictated by the control signal.

Flow characteristic

An equal-percentage flow characteristic is produced by profiling the valve cone. The bypass exhibits a linear characteristic curve.

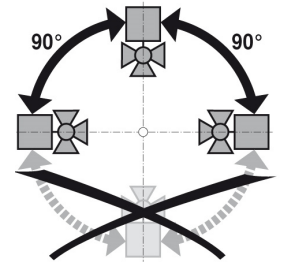
Manual operation

On the EV or RV linear actuator, the valve stem can be actuated manually using a hexagonal key.

Installation notes

Recommended mounting positions

The globe valve may be mounted either **vertically** or **horizontally**. It is not permissible to mount the globe valve with the stem pointing downwards.



Water quality requirements

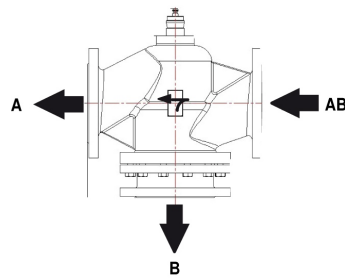
- The water quality requirements specified in VDI 2035 must be adhered to.
- Globe valves are relatively sensitive control devices. In order to ensure a long service life, it is advisable to fit **strainers**.

Maintenance

- The globe valves and linear actuators are maintenance-free.
- Before any kind of service work is carried out on actuator sets of this type, it is essential to isolate the linear actuator from the power supply (by unplugging the power lead). Any pumps in the part of the piping system concerned must also be switched off and the appropriate isolating fittings closed (allow everything to cool down first if necessary and reduce the pressure in the system to atmospheric).

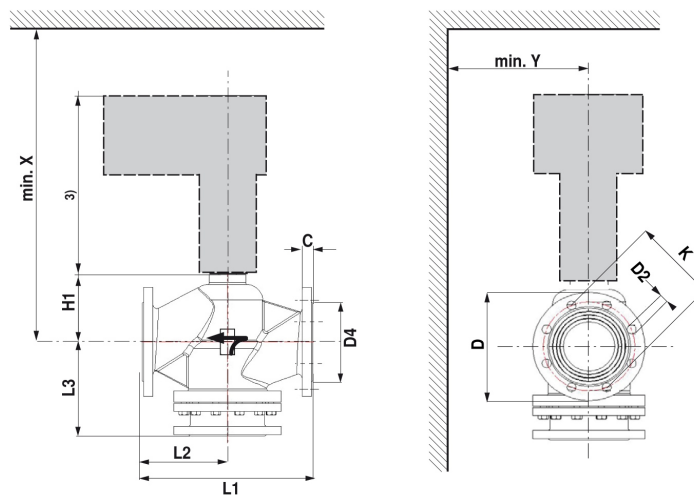
Direction of flow

- The system must not be returned to service until the globe valve and the linear actuator have been properly reassembled in accordance with the instructions and the pipework has been refilled in the proper manner.
- The direction of flow, specified by an arrow on the housing, is to be complied with, since otherwise the globe valve can be damaged.



Dimensions and weights

Dimensional drawings



DN	C	D	D2	D4	K	L1	L2	L3	H1	X	Y	Weight
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
65	20	185	4-19	118	145	290	145	156	104.5	315	145	24
80	22	200	8-19	132	160	310	155	185	120	445	150	34
100	23	220	8-19	156	180	350	175	202	137	465	160	49
125	24	250	8-19	184	210	400	200	240	157	485	175	63
150	25	285	8-23	211	240	480	240	270	171	500	195	82
200	26	340	12-23	266	295	500	250	318	185	510	220	129

3) The actuator dimensions can be found on the respective actuator data sheet.